TOTAL ACCESS® OPTI-T200

JOBAID
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OPTI-T200

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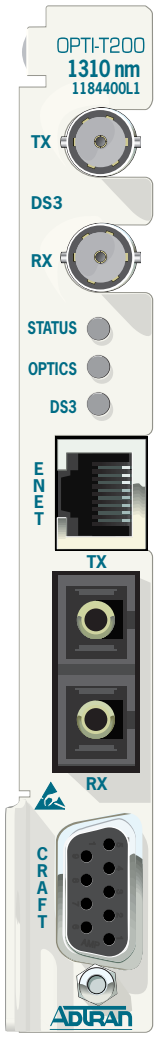

CAUTION!
SUBJECT TO ELECTROSTATIC DAMAGE OR DECREASE IN RELIABILITY.
HANDLING PRECAUTIONS REQUIRED.

LED STATUS

STATUS	○	Off	No power to unit
	●	Green	Power up and initialization OK
	●	Yellow	Unit is in Out-of-Service – Unassigned mode
	✳	Flashing Yellow	Unit is in Out-of-Service – Maintenance mode
	●	Red	Unit has an equipment failure
OPTICS	●	Green	Normal Operation
	●	Yellow	Soft failure (e.g. RDI)
	✳	Flashing Yellow	Unit in Test (e.g. Loopback)
	●	Red	LOS, LOL, or other hard alarms on optical interface
	✶	Flashing Red	Unit in Test (e.g. Loopback) with an alarm present on the Optical Interface
DS3	○	Off	DS3 disabled
	●	Green	DS3 normal operation
	●	Yellow	Soft failure (e.g. RDI)
	✳	Flashing Yellow	Unit in Test (e.g. Loopback)
	●	Red	LOS, LOL, or other hard alarms on DS3 interface
	✶	Flashing Red	Unit in Test (e.g. Loopback) with an alarm present on the DS3 Interface

CRAFT INTERFACE

- Connect to terminal using a serial cable with a male DB-9 connector.
- Set VT100 terminal emulation to 9600 bps, 8 Data Bits, No Parity, 1 Stop Bit, and No Flow Control.
- Baud rate is configurable at 9600, 19,200, 38,400 or 115,200 bps.

DESCRIPTION

The OPTI-T200 is designed to work in a back-to-back mode of operation, OPTI-T200 to OPTI-T200. It uses a standard 1310 nm OC3 signal to interface between the systems and provides a single DS3 signal to the loop. The OPTI-T200 provides DCC communication with TL1 support. A craft port and an Ethernet port are available on the front panel for management. The OPTI-T200 is a T200 mechanics card, which will fit standard T200 and T400 enclosures.

Compliant with SONET standards, the OPTI-T200 functions as a terminal multiplexer, detecting standard optical, SONET, and DS3 related alarms and conditions. The OPTI-T200 is easily managed with TL1 or TCP/IP commands, or Telnet sessions separately to each system or via the craft interface.

INSTALLATION

1 The OPTI-T200 is a T200 mechanics card which will fit standard T200 and T400 enclosures. Ensure the appropriate chassis is installed before proceeding with the installation.

Carefully insert the OPTI-T200 halfway into the selected slot. Route the fiber cables to the front panel and approximately 4 inches past the SC receptacles (to create slack). Gently but firmly push the OPTI-T200 all the way into the slot, being careful not to pinch the fibers between the front panel and the shelf.

WARNING: Once fully inserted into the chassis, the module will be powered (provided power is connected to the chassis).

2 When the OPTI-T200 powers up, it performs a self-test. The front panel LEDs illuminate for approximately 8 seconds. The self-test is complete once the STATUS LED illuminates Green.

ALARM CONTACT DEFINITION

Lead	Assignment	Contact (functionally) *	Contact Rating
T (pin 7)	Failure detected on optical facility	Normally Open	60 VDC
R (pin 13)			0.2 A
T1 (pin 41)	Failure detected on coax facility	Normally Open	1M cycles (min)
R1 (pin 47)			–40°C to +65°C (temp)

NOTE: Simultaneous T/R & T1/R1 contact closures used to indicate internal unit failure, loss of OC-3/DS-3 inputs, or loss of power.

POWER: –48VR = Pin 17, –48VDC = Pin 35, Frame-GND = Pin27.

■ For a complete Installation and Maintenance Practice (P/N 61184400L1-5): 877-457-5007, Faxback Document 918. Please have your fax number ready. ■

PROVISIONING OPTIONS

Upon initial installation, the OPTI-T200 uses factory default settings. To provision the OPTI-T200, connect a terminal emulator via the RS-232 (DB-9) connector on the front panel. The terminal must be VT100 compatible and set for 9600 bps, 8 data bits, no parity and 1 stop bit. The following table lists the provisioning settings and their default values. The settings are retained in a nonvolatile memory device in case of power loss to the OPTI-T200.

Options	Settings (Default in Bold)
Service State	**In Service**, Out Of Service-Unassigned, Out Of Service-Maintenance
DS3 Provisioning	
DS3 Interface	**Enable**, Disable
DS3 Line Build Out	**Short**, Long
Signal Fail (SF) Thresh	**$1x10^{-3}$**, $1x10^{-4}$, $1x10^{-5}$
Signal Degrade (SD) Thresh	**$1x10^{-5}$**, $1x10^{-6}$, $1x10^{-7}$, $1x10^{-8}$, $1x10^{-9}$
Clock Source (TX)	1. **Receive OC-3** 2. Free Run
CLLI Code	User definable up to 20 characters
Network Provisioning	
IP Address	User Defined Format = x.x.x.x where x = 0–255
Subnet Mask	User Defined Format = x.x.x.x where x = 0–255
Default Gateway	User Defined Format = x.x.x.x where x = 0–255
Telnet Menu Port	User defined = 0–65535 (23)
Telnet (TL-1) Port	User defined = 0–65535 (2001)
Time and Date	User Defined
Mount Location	Central Office, **Remote**
Account Provisioning	See the Account Provisioning section to the right of this table.
Restore Factory Defaults	
Software Upgrade	TFTP, XModem, YModem

NOTE: To navigate through the menus, select the desired entry and press Enter. To work backward in the menus, press the Escape key. Some entries can be changed in only the Out-of-Service – Maintenance mode.

ACCOUNT PROVISIONING

1. Account 1
   a) User Name – User Defined, up to 15 characters
   b) Password – User Defined, up to 15 characters
   c) Permission Level – Disabled, Read Only, Read-Write, Administrator
   d) Delete Account
2. Account 2 – Same options as Account 1
3. Account 3 – Same options as Account 1
4. Account 4 – Same options as Account 1
5. Account 5 – Same options as Account 1
6. Account 6 – Same options as Account 1
7. Account 7 – Same options as Account 1
8. Account 8 – Same options as Account 1
9. Account 9 – Same options as Account 1
10. Account 10 – Same options as Account 1

SOFTWARE UPGRADE

Software download for the local OPTI-T200 is provided using XModem or YModem via the craft port or TFTP, XModem or YModem via Ethernet. Software download to a remote OPTI-T200 is accomplished either from the CO OPTI-T200 craft port or its Ethernet port. The download is carried over the DCC channel. TFTP is supported from only the Ethernet interface, and both systems would require IP addresses.

COMPLIANCE

This product intended for use in Restricted Access Areas only, and is intended to be installed in a Type "B" or "E" enclosure. This product complies with UL 60950.

Code	Input	Output
Power Code (PC)	F	C
Telecommunication Code (TC)	–	–
Installation Code (IC)	A	–

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by ADTRAN could void the user's authority to operate this equipment.

WARRANTY

ADTRAN will replace or repair this product within the warranty period if it does not meet its published specifications or fails while in service. Warranty information can be found at www.adtran.com/warranty. U.S. and Canada customer Faxback: 877-457-5007, Document 414.